



1) restricted connection dimension

All dimensions are in mm; tolerances according to ISO 2768 m-H

**Interface**

RPC-2.92 mechanically compatible with RPC-3.50 and SMA  
 RPC-2.40 mechanically compatible with RPC-1.85

**Documents**

N/A

**Material and plating**

**Connector parts**

Center contact  
 Outer contact  
 Coupling nut  
 Dielectric

**Material**

CuBe  
 Stainless steel  
 Stainless steel  
 PEEK

**Plating**

Gold, min. 1.27 µm, over chemical nickel  
 Passivated  
 Passivated

**ADAPTOR**  
**RPC-2.40 JACK – RPC-2.92 JACK**
**09KR102-K0AS3****Electrical data**

Impedance	50 Ω
Frequency	DC to 40 GHz
Return loss	≥ 26 dB, DC to 18 GHz ≥ 23 dB, 18 GHz to 40 GHz
Insertion loss	≤ 0.05 x $\sqrt{f(\text{GHz})}$ dB
Insulation resistance	≥ 5 GΩ
Center contact resistance RPC-2.92	≤ 3.0 mΩ
Outer contact resistance RPC-2.92	≤ 2.0 mΩ
Center contact resistance RPC-2.40	≤ 4.0 mΩ
Outer contact resistance RPC-2.40	≤ 2.5 mΩ
Test voltage	500 V rms
Working voltage	150 V rms
RF-leakage	≥ 100 dB up to 1 GHz

**Mechanical data**

Mating cycles	≥ 500
Center contact captivation	≥ 27 N
Coupling test torque RPC-2.92	1.70 Nm
Recommended torque RPC-2.92	0.80 Nm to 1.10 Nm
Coupling test torque RPC-2.40	1.65 Nm
Recommended torque RPC-2.40	0.80 Nm to 1.10 Nm
Recommended torque ruggedized nut	1.36 Nm

**Environmental data**

Temperature range	-40°C to +85°C
Thermal shock	MIL-STD-202, Method 107, Condition B
Corrosion	MIL-STD-202, Method 101, Condition B
Vibration	MIL-STD-202, Method 204, Condition D
Shock	MIL-STD-202, Method 213, Condition I
Moisture resistance 2002/95/EC (RoHS)	MIL-STD-202, Method 106 compliant

**Tooling**

N/A

**Suitable cables**

N/A

**Packing**

Standard	1 pce in box
Weight	43.3 g/pce

While the information has been carefully compiled to the best of our knowledge, nothing is intended as representation or warranty on our part and no statement herein shall be construed as recommendation to infringe existing patents. In the effort to improve our products, we reserve the right to make changes judged to be necessary.

Draft	Date	Approved	Date	Rev.	Engineering change number	Name	Date
Herbert Babinger	05/05/10	Martin Moder	12/07/10	a00	10-s437	Maik Knoll	09/07/10
Rosenberger Hochfrequenztechnik GmbH & Co. KG P.O.Box 1260 D-84526 Tittmoning Germany <a href="http://www.rosenberger.de">www.rosenberger.de</a>					Tel.: +49 8684 18-0 Fax: +49 8684 18-499 email: <a href="mailto:info@rosenberger.de">info@rosenberger.de</a>		Page 2 / 2